BY ORDER OF THE COMMANDER, 436TH AIRLIFT WING AIR FORCE INSTRUCTION 11-2C-5, VOLUME 2



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Flying Operations

C-5 AIRCREW EVALUATION CRITERIA

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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AFI 11-2C-5 Volume 2, 1 December 1999, is supplemented as follows:

NOTE: This supplement will be distributed to HQ AMC/21 AF OPRs, as applicable. In addition, it should not be less restrictive than the provisions of this or any other instructions without prior authorization from the appropriate HQ AMC/21 AF OPR.

- **6.1. General.** Purpose. The 436/512 OG Aircrew Standardization/Evaluations Program provides quality control for the aircrew force and provides commanders of the airlift squadrons with meaningful indicators reflecting the effectiveness of aircrew training. It ensures C-5 aircrews are capable of performing their mission across the spectrum from routine operations to surviving in a hostile environment.
- **6.2. (Added) Applicability**. This supplement establishes, defines, and implements the 436/512 OG Standardization/ Evaluation Flight Evaluations Guidelines. It applies to all C-5 aircrew members assigned/attached to the 436/512 AW. 436/512 OG specific items in this supplement are identified by the organization in the paragraph heading. Absence of the organization in the paragraph heading indicates applicability to both organizations.

6.3. (Added) Objectives.

- 6.3.1. (Added) Standardize 436/512 OG aircrew evaluation procedures for C-5 evaluations.
- 6.3.2. (Added) Ensure standardization of aircrew evaluations IAW AFI 11-202V2 and AFI 11-2C-5V2.
- 6.3.3. (Added) Ensure compliance with HQ USAF, AMC, NAF, and local operational, training, and administrative flying directives.
- **6.4.** (Added) Recommended Changes. Aircrew members are encouraged to submit changes to this supplement to the 436 OGV using the AF Form 847.
- 6.5. (Added) Flight Evaluations.

- 6.5.1. (Added) Due to the variety of mission qualifications, it is impractical to conduct all recurring mission evaluations in conjunction with periodic qualification evaluations. For initial/requalification instructor and mission evaluations, take the end of course tests, if applicable, and record on the AF Form 8. Upon entering into the INSTM/QUAL/MSN evaluation phase, all applicable sections of the open/closed book tests will be taken. Testing should be accomplished within the first 2 months of the eligibility period. Recurring mission evaluations in air refueling, airdrop, and SOLL II will not have test scores on the AF Form 8.
- 6.5.2. (Added) Emergency Procedures Evaluations (EPE): An EPE is required on all evaluations. Exception: No-Notice and Spot evaluations do not require an EPE unless the evaluation updates the qualification expiration date. A selection of abnormal and emergency procedures and BOLDFACE items satisfies the EPE requirement. OGV will maintain a list of EPE program requirements (topics, interest items, etc.) on file in OGV (on the OGV network drive, EPE folder) and provide a copy to each squadron DOV. This list will be reviewed/updated annually. Any changes will be briefed at quarterly SEB meetings and new EPE copies will be provided to squadron DOVs.
- 6.5.2.1. (Added) Pilot and flight engineer examiners may administer the EPE in the WST/CPT. If an examinee's EPE is not administered in the WST/CPT, administer it during the flight evaluation.
- 6.5.3. (Added) When an individual receives a Q-2 or Q-3 while away for Dover, every effort will be made to have that individual return to Dover as soon as possible. Upon arrival at home station, the individual will enter requalification/additional training, if required, without delay. Units are requested to inform OGV of the Q-2 or Q-3 evaluation.

6.6. (Added) Flight Evaluation Guidelines.

- 6.6.1. (Added) This section establishes local policy for flight evaluations and augments AFI 11-202V2, AFI 11-2C-5V2 and the AF Form 3862. Tolerance criteria for evaluations are listed in the MTL/ESD and AFI 11-2C-5V2.
- 6.6.2. (Added) (436OG) Conduct pilot periodic INSTM/QUAL/MSN evaluations in the WST using the Advanced Simulator Program (ASP). Conduct initial and requalification evaluations in the airplane. Pilot recheck evaluations due to a Q-3 for INSTM/QUAL/MSN items may be accomplished in the WST.
- 6.6.3. (Added) Unsatisfactory Performance. For evaluations graded Q-2, or Q-3/1, document the deficient areas and any recommended training on the AF Form 8. If necessary, use the AF Form 4022, Aircrew Training Folder and AF Form 4023, Aircrew Training Progress Report to document extensive additional training. Squadron DOV is responsible for tracking the completion of additional training. For Q-2 evaluations, include the examinee in the Review and Certification (R&C) process until additional training is completed. When the training is complete, the instructor/examiner completing the training will annotate the additional training completed block on the front of the AF Form 8. If a AF Form 4022 was used to document additional training, place the completed AF Form 4025, Aircrew Summary/Close-Out Report under Tab 2 Section I in the individual's FEF and a copy in the individual's AF Form 4022.
- 6.6.3.1. (Added) For evaluations graded Q-3, deficient areas and recommendations for additional training will be thoroughly documented on the AF Form 8 by the examiner. Squadron DOV is responsible for notifying the training section, tracking the requalification period, and including the individual in the R&C process. Training section is responsible for establishing an AF Form 4022 and completing all required training in the allotted time. The AF Form 4024, **Aircrew Training Accomplishment Report**, may be included in the training record, if applicable. Upon completion of training, place the completed AF Form 4025 under Tab 2 Section I in the individual's FEF and a copy in the individual's AF Form 4022.

6.7. (Added) Pilot Evaluations.

6.7.1. (Added) Copilot Periodic/INIT/RQ/INSTM/QUAL/MSN Evaluations: Flown from the right seat. Integrate the following as a minimum:

Table 6.1. (Added) Copilot Evaluation Requirements.

ILS	Partial Flap Landing
PAR (evaluate verbally if not available)	VFR Pattern
Two Non-Precision Approaches: One must be to a circling approach	SID or Departure Instructions
	Holding or Procedure Turn Entry
Full Flap Landing	4-Engine Missed App/Go-Around

- 6.7.2. (Added) First Pilot INIT/RQ/INSTM/QUAL/MSN Evaluations: The same as an aircraft commander evaluation as listed in 6.7.3. (Added) below, except a CAT II ILS and a no-flap landing will not be flown. For copilots receiving an initial First Pilot evaluation log the Form 8 as an initial evaluation and, make a remark in the comments section noting that the evaluation fulfills the First Pilot evaluation requirements (e.g. "First Pilot qualified"). *NOTE:* Pilots receiving an AC evaluation at Altus and flying as a first pilot, will complete a full AC profile. (512 OG) Pilots not scheduled to complete AC upgrade in the next 17 months will receive a first pilot (MC) evaluation.
- 6.7.3. (Added) Aircraft Commander Periodic/INIT/RQ/INSTM/QUAL/MSN Evaluations: AC profile is flown primarily from the left seat, and will include a right seat instrument approach and landing. IP profile may be flown from either seat. IP must critique another pilot's takeoff, pattern, and landing to demonstrate instructor abilities. Integrate the following as a minimum on Aircraft Commander Periodic/INIT/RQ/INSTM/QUAL/MSN Evaluations:

Table 6.2. (Added) Aircraft Commander Evaluation Requirements.

Table 0.2. (Added) Afferant Commander Evaluation Requirements.		
PAR (evaluate verbally if not available)	3-Engine Missed Approach/Go-Around	
ILS	3-Engine Approach and Landing	
CAT II ILS (must be flown from left seat)	Partial Flap Landing	
Two Non-Precision Approaches: One must be to a circling approach	Full Flap Landing	
VFR Pattern	No-Flap Landing	
SID or Departure Instructions	Right-Seat Instrument Approach and Landing (N/A for EP/IP)	
Holding or Procedure Turn Entry	Taxi Procedures (180° turn required for first pilots and ACs with less than 150 hours in command	

6.7.4. (Added) Instructor Pilot INIT/RQ Evaluations: Flown from the right seat. This profile will not reset the INSTM/QUAL/MSN EVAL. To reset this cycle, a full AC profile (6.7.2. (Added)) must be flown. Fly the following as a minimum:

- 1 Instrument Approach	3-Engine Landing
Partial Flap Landing	No-Flap Landing
Full-Flap Landing	3-Engine Missed Approach

Table 6.3. (Added) Instructor Pilot Evaluation Requirements.

6.7.4.1. (Added) When an instructor or flight examiner is receiving a periodic or INIT/RQ evaluation, they will accomplish the pre-mission training/student briefing and critique as well as complete their evaluation profile.

NOTE: Plan the evaluation profile to reset the INSTM/QUAL/MSN 17-month cycle. If full profile is not flown for IP evaluation, expiration date is the same as current INSTM/QUAL/MSN.

- 6.7.5. (Added) En Route Evaluations. Squadron Commanders will determine en route evaluation requirements for individuals upgrading to Aircraft Commander. Consider experience, previous mission and training performance when assessing whether to administer an en route evaluation. Pilots who do not receive an en route evaluation during the Aircraft Commander upgrade will have a recommendation for certification documented on the AF Form 4023 by the instructor who supervised the "recommend ride". The Squadron Commander will then certify the new Aircraft Commander on the AF Form 1381, **USAF Certification of Aircrew Training**. Aircraft Commanders who did not receive an initial en route evaluation, should receive a SPOT evaluation within 8 months after certification to Aircraft Commander. In addition to the requirements of AFI 11-2C-5V2, initial en route and SPOT evaluations will emphasize mission planning, crew management, flight planning, mission execution, and fuel conservation. A minimum of four mission legs is recommended for an initial en route evaluation and two mission legs minimum for a SPOT, following AC certification.
- 6.7.6. (Added) Air Refueling INIT/RQ/Periodic Evaluations. Evaluate air refueling qualified pilots (MP-Level) in the left seat. A rendezvous or closure from a minimum of 1 nm is required. Breakaway procedures should be evaluated in flight, but may be evaluated in an ATD if not performed in the aircraft. Manual boom latching and overrun procedures may be verbally evaluated. Use 10-min autopilot on and 5-min autopilot off as a guide for sustained contacts.
- 6.7.6.1. (Added) Air Refueling (IP Level) INIT/RQ Evaluations. Evaluate all Initial AR IPs from the right seat IAW AFI 11-2C-5V2. A boom limits demonstration is required for all initial AR IP evaluations. The AR periodic evaluation date should be reset when giving an AR IP initial evaluation; therefore, all periodic evaluation requirements must be met. When resetting the AR periodic evaluations date, the evaluation should focus on right seat procedures and include a stable contact from the left seat.
- 6.7.6.2. (Added) Air Refueling (IP/Level) Periodic Evaluations. For periodic evaluations of a current and qualified AR IP, the examinee should be in command during the evaluation. The examiner may sit where he/she chooses. Evaluate AR IPs during their periodic AR evaluation as outlined in paragraph 6.7.6. (Added) Evaluate AR IP/EPs on instructional duties during the mission pre-brief, debrief and during the sortie. (436 OG) Both left and right seat contacts should be evaluated.
- 6.7.7. (Added) (436 OG) Airdrop (AD) INIT/RQ Periodic Evaluations (Pilots, all levels). Evaluations on local sorties will only be allowed after concurrence with OGV. Conduct evaluation on a tactical mission profile including a departure, low-level route, airdrop, and tactical recovery. If conditions result in a no-drop (slow down checklist must be completed), the evaluator will determine if the evaluation can be completed.) Initial/Periodic AD evaluations for left seat IPs will include instruction of airdrop and may be flown from either seat.

6.7.8. (Added) (436 OG) SOLL II INIT/RQ/Periodic Evaluations (Pilots, all levels). Evaluations on local sorties will only be allowed after concurrence with OGV. Initial Left Seat evaluations will be en route evaluations. (The evaluation will include a covert takeoff, low level route, airborne radar approach (ARA), missed approach, covert landing, taxi, and ground operations. Initial Left Seat evaluations will include a 180-degree turn on night vision goggles (NVB).) If the Left Seat candidate is an IP, a covert touch and go landing and right seat landing will also be evaluated. Right seat pilots must demonstrate the ability to reset flaps and trim during a touch and go. Ground operations will consist of a loading exercise configuration using the full SOLL II Block-In/Starting Engines/Block-Out checklists. No actual upload/download is required. Evaluate NVG limitations, SOLL II restrictions and forward area refueling point (FARP) operations (if not accomplished during the mission) verbally.

6.8. (Added) (436 OG) Advanced Simulator Program (ASP) Evaluation Program.

- 6.8.1. (Added) Administration. The C-5 Advanced Simulator Program (ASP) consists of two evaluations accomplished in the simulator. The Maneuver Validation Evaluation (MVE) replaces the pilot's periodic INSTM/QUAL/MSN evaluation. A Line Oriented Evaluation (LOE) for pilots and flight engineers evaluates Crew/Cockpit Resource Management (CRM). The LOE is a requisite for the pilot INSTM/QUAL/MSN and for the first flight engineer and above QUAL/MSN evaluations. For flight engineers, the LOE should be accomplished during the first two months of the eligibility period. Upgrade, requalification, second flight engineer, and loadmaster evaluations do not require an LOE.
- 6.8.2. (Added) Documentation. Following each evaluation, an AF Form 8, MVE Computer Scoring Sheet (pilots only) and LOE Computer Scoring Sheet will be completed. Document periodic evaluations on a single AF Form 8. Document the MVE in the flight phase as SIM INSTM/QUAL/MSN. Document the LOE in the flight phase as SIM MSN. As per para 1.14 and 1.11.3, the AF Form 3862 is required to be used. At the examiner's discretion, additional worksheets may be used to facilitate documentation. Worksheets available to the examiner include AF Form 4031 and the Maneuver Validation Worksheet produced by Flight Safety Services Corporation (FSSC). Annotate which LOE profile was flown in the comments section of the AF Form 8.
- 6.8.3. (Added) Scheduling. In the event of a Q-2 or Q-3 performance during the MVE or LOE, individuals will not proceed to the next event until successfully completing the retraining/recheck. Crewmembers will not be in a DNIF status while accomplishing these evaluations. Squadron DOV will notify the examinees in advance of their evaluation schedule.
- 6.8.4. (Added) Maneuver Validation Evaluation (MVE).
- 6.8.4.1. (Added) This evaluation is setup for two pilots, preferably the same pilots who were evaluated in the Line Oriented Evaluation (LOE) together. Units will provide one pilot flight examiner (EP) to administer the evaluation and one flight engineer (MF or higher) for pilot support. The flight engineer will not be evaluated during the MVE.
- 6.8.4.2. (Added) The profile is the same as the current INSTM/QUAL/MSN evaluation conducted in the airplane. The first evaluation should be completed in the first two-hour block and the second evaluation should follow after a brief break period. Squadrons should pair an AC (or higher crew qual) with an FP or MC for the LOE and MVE. This will increase the likelihood of completing both pilot evaluations in the 4-hour simulator period, as well as optimizing the crew for the LOE. To shorten the pre-flight time, examiners may direct the pilots to begin with the "Before Taxi" checklist.
- 6.8.4.3. (Added) The examinees will meet with the EP two hours prior to the start of the simulator period for briefing and verbal evaluation. The EP may occupy the jump seat or the other pilot seat during the

evaluation. The EP may elect to perform touch-and-go landings to expedite the profile flow. Otherwise, all landings should be planned to a full stop. Following a full stop, the EP will ensure the airplane is configured for takeoff. The simulator operator will insure all malfunctions are cleared and affected system operation is restored. Pilots should accomplish the "lineup" checklist prior to subsequent takeoff. The simulator operator will provide air traffic services. The EP must closely coordinate with the simulator operator to ensure weather conditions, malfunctions, and radar vectors are suitable for performance of each approach. Emergency procedures should be coordinated in advance with the simulator operator for realism. Do not simulate engine out emergencies by retarding a throttle. Engine out approaches will not be touch and go landings. Compound emergencies are not authorized.

- 6.8.5. (Added) Line Oriented Evaluation (LOE).
- 6.8.5.1. (Added) The LOE requires a basic (pilot and engineer) crew. Because the performance of one crew position could adversely impact an evaluation in the other crew position, both a pilot and engineer examiner (EP, EF) should be present for each LOE, even if there is no examinee from their respective crew position. Do not evaluate the scanner. Crewmembers not requiring an LOE will not receive an AF Form 8, however, they should be observed using the Maneuver Validation Worksheet from Flight Safety Services Corporation, (FSSC).
- 6.8.5.2. (Added) The general profile will be an operational mission with multiple malfunctions or complex situations requiring good crew interaction for successful mission accomplishment.
- 6.8.5.3. (Added) Examiners will occupy the appropriate seats (pilot examiner in jump seat, engineer examiner in FE instructor seat) and may be involved in the profile (e.g., portray additional crewmembers, etc). The simulator operator (a FSSC pilot instructor) will operate the pilot instructor operation station and will act as ATC. Only one mission segment will be flown, with the crewmembers occupying duty stations based on their qualification (e.g., copilot in the right seat, instructor pilot in either seat, second flight engineer in the scanner's seat, etc.). If the crew consists of two aircraft commanders, one will perform copilot duties for the duration of the mission. However, every AC or above must be evaluated in the left seat regardless of the number of LOEs flown from the right seat. Similarly, each first engineer must be evaluated in the engineer's position. Each mission segment should last no more than 2 hours. Flight Safety videotapes each LOE. Erase tapes immediately following the debriefing.
- 6.8.5.4. (Added) The pilot examiner and engineer examiner will confer to determine the overall grades for the evaluation and should conduct the debriefing together with the entire crew. Flight examiners will normally assess the same grade for all crewmembers in the LOE. Flight examiners will use the maneuver validation worksheet developed by FSSC to grade each area of the crew's performance.
- 6.8.5.5. (Added) The intent of this evaluation is to quantify crew effectiveness, particularly focusing on CRM. As with any other type of evaluation, flight examiners may disqualify any crewmember based solely on unsatisfactory CRM performance, even if no technical error is observed.

6.9. (Added) (436 OG) Navigator Evaluations.

6.9.1. (Added) Mission Navigator. Initial (INIT), Periodic (MSN) and Requalification (REQ). Qualification evaluation profile must include a Category I route, or a Category II route using Category I procedures, of sufficient length to demonstrate proficiency in navigation procedure. Use of Category II route in lieu of a Category I route requires OGV concurrence. The evaluation will include mission planning, over water flight and fuel planning, takeoff and landing monitoring, over water procedures, crew communications, emergency equipment and emergency procedures.

- 6.9.2. (Added) SOLL II Map Navigator/Airdrop. Initial (INIT), Periodic (MSN) and Re-qualification (RQ) Evaluations. The evaluation will consist of a tactical route to an ARA and/or a Computed Air Release Point (CARP) airdrop (actual or Simulated Airdrop Training Bundle [SATB]). Initial Map Navigator evaluations will be on an unfamiliar route to an unfamiliar LZ and/or DZ. Missions may be a combination high/low profile; at least 30 minutes must be flown at low level. Do not schedule evaluation routes for less that 30-minutes from combat entry to time of arrival(TOA) or time over target (TOT). Map Navigator evaluations will include: low level map reading, turn point identification, crew coordination, back-up timing, ARA graph construction/theory, NVG operation, emergency procedures, drop zone acquisition and airdrop accuracy. Airdrop accuracy within the following Circular Error (CE): HE, Personnel, SATB: 300 meters. For airdrops above 800' AGL, add 15 meters for each 100' above 800' to a maximum total CE of 600 meters. For night visual airdrops, add 50 meters to allowable CE not to exceed the above maximums. Initial Map Navigator evaluations on local sorties require concurrence with OGV.
- 6.9.3. (Added) SOLL II Radar Navigator. Initial (INIT), Periodic (MSN) and Re-qualification (RQ) Evaluations. Missions may be a combination high/low profile; at least 30 minutes must be flown at low level. Do not schedule evaluation routes for less than 30-minutes from combat entry to time of arrival (TOA) or time over target (TOT). Evaluate Radar Navigators on positioning duties, weather radar use and weather avoidance. Also evaluate low-level procedures, crew coordination, terminology, timing and slowdown computations, ARA graph construction/theory, SOLL II emergency procedures, and aircraft equipment. Periodic RN/AD evaluations for EN/INs will include a discussion of SOLL II and airdrop instruction techniques and procedures. Evaluations on local sorties require concurrence with OGV.
- 6.9.4. (Added) Instructor Navigator Evaluations. Initial (INIT), Periodic (MSN) and Re-qualification (RQ) evaluations. Conduct initial instructor navigator evaluations with the instructor candidate instructing an actual student navigator on a SOLL II and/or airdrop mission (flight examiner may satisfy this requirement). (Exception: previous INs can receive this evaluation on an over water flight. Conduct periodic instructor evaluations in conjunction with periodic SOLL II/AD evaluations.
- 6.9.5. (Added) Instructor Navigator INIT Evaluations. Requirements for this evaluation will be IAW AFI 11-2C-5V2. This evaluation requires an actual student and should be completed on an airdrop/SOLL II mission (Exception: previous INs can receive this evaluation on an over water flight, and the examiner can be the "student"). Periodic instructor evaluations are not required, but if a periodic evaluation is accomplished after initially qualified, instructional abilities will be evaluated.

6.10. (Added) Flight Engineer Evaluations.

- 6.10.1. (Added) Initial Qualification Evaluations. This evaluation should be administered on an operational mission from home-station to home station with a minimum of four legs.
- 6.10.2. (Added) Initial Qualification Instructor Evaluations. This evaluation should be administered on an operational mission with a minimum of three legs and shall have a student flight engineer.
- 6.10.3. (Added) First Flight Engineer RQ/Periodic Evaluations. This evaluation should be administered on a non-SOLL II operational mission with a minimum of two legs.
- 6.10.3.1. (Added) Instructor/Examiner RQ/Periodic Evaluations. The evaluation should include at least three mission legs (436 OG)/two legs mission (512 OG).
- 6.10.4. (Added) (436 OG) SOLL II INIT Evaluations. Administer this evaluation on a SOLL II mission (non-local) with a minimum of two legs and two infils and/or exfils. The examinee shall be observed from the flight engineer's and the scanner's positions.

- 6.10.4.1. (Added) (436 OG) SOLL II RQ/Periodic Evaluations. This evaluation may be administered on a SOLL II local training mission with concurrence of OGV. This evaluation should be administered one hour after sunset.
- 6.10.5. (Added) Second Flight Engineer Periodic Evaluations. Evaluation may be administered on a local training mission.
- 6.10.6. (Added) Any deviations from the above procedures require 436/512 OG/OGV approval.

6.11. (Added) Loadmaster Evaluations.

- 6.11.1. (Added) Initial qualification/mission evaluations. Requirements for this evaluation will be IAW AFI 11-2C-5V2. Administer this evaluation on an operational mission from home-station with a minimum of two mission legs.
- 6.11.2. (Added) Initial instructor evaluations. Requirements for this evaluation will be IAW AFI 11-2C-5V2. Administer this evaluation on an operational mission with the instructor candidate providing instruction to a loadmaster student.
- 6.11.3. (Added) (436 OG) Qualification/Mission Evaluations (Initial, Periodic, and Requalification) should not be administered on SOLL II missions. Exceptions require advance OGV approval.
- 6.11.4. (Added) (436 OG) Initial Airdrop Evaluation; every effort must be made to have paratroop personnel in addition to the heavy equipment platform. In the event that paratroopers are not available, the examiner will conduct a thorough verbal examination and will utilize personnel airdrop equipment to conduct actual demonstration. When the individual is scheduled for their first airdrop mission with personnel airdrops, they will be required to be under the supervision of an airdrop qualified instructor/flight examiner. The instructor/examiner will enter the following statement in the comments section on the Form 8 after successful completion of the evaluation; Restrictions: A. Supervised Status during first personnel airdrop mission under the supervision of a qualified airdrop instructor/flight examiner. After the individual successfully completes their first personnel airdrop, the instructor/examiner will annotate the date completed and sign in the COMMENTS section on the Form 8.
- 6.11.5. (Added) Tolerance criteria for evaluations is listed in the MTL/ESD and AFI 11-2C-5V2.

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